

Application No.: 09/901,317
Art Unit: 2143

Attorney Docket No.: 2000-0280-CON

In the Specification:

Kindly amend the first complete paragraph on page 11 of the specification as follows:

Fig. [[1]] 3 illustrates a more detailed example. With reference to Fig. [[1]] 3, two partnering CDNs 110 and 120 are shown. Client 100 seeks to access content which originates from customer server 190 which may or may not be operated by the customer. The customer has signed up for content distribution services with CDN 110, which in turn wishes to redirect some of the requests to CDN 120. CDN 110 has what the inventors refer to as a “brokering” DNS server 150 which is the authoritative DNS server for the domain of the URLs for the content to be requested.

Kindly amend the paragraph beginning on line 10 of page 13 of the specification as follows:

5. The client 100 at 111 then sends a request for the content to the selected CDN server, e.g. shown in Fig. [[1]] 3 as server 164 in CDN 120.

Kindly amend the paragraph beginning on line 4 of page 14 of the specification as follows:

Other variants on redirection can be utilized that address the potential performance penalty in redirection. It may be possible to “piggyback” on any existing load-balancing scheme that may exist within CDN 110, e.g. where the brokering DNS server 150 is incapable of selecting the right server within the CDN. To save on the additional round-trip due to the indirection introduced by the brokering DNS, a triangular technique can be employed: e.g. the brokering DNS server 150 redirects the query to a local host by rewriting and retransmitting the query packet, shown in Fig.

Application No.: 09/901,317
Art Unit: 2143

Attorney Docket No.: 2000-0280-CON

[[1]] 3 as 107 then 108. This only works if the client DNS server 140 is prepared to receive a response from a DNS server, i.e. 142, other than the one to which it sent out the query (known anti-spoofing defense mechanisms thus may limit the effectiveness of this technique). Likewise, the brokering DNS server 150 can forward the DNS query for an outsourced request to a partner CDN 120 as in the previous variation; however, it uses the IP address of the originator of the query as the source IP address in the query packet headers. The outside CDN DNS 143 will then perform server selection relative to the originator IP address and return the DNS response directly to the originator of the query. The total number of exchanged messages is reduced by one.